CUSTOM POWDER SYSTEMS.
THE CONTAINMENT COMPANY

INTEGRATED CONTAINMENT SYSTEMS®

2715 N Airport Commerce
Springfield MO 65803
417-868-8002
info@custom-powder.com

Blending Type Comparison

Pedestal Blender (PB) vs. Column Blender (CB)

A. Versatility – Column Blender Best

A pedestal blender is a single purpose machine that can only blend. A column blender has the additional capability a lifting axis and slew (placing) axis that offers the additional capabilities.

1. IBC to IBC transfers – One IBC can be placed on the CB with another IBC placed on the floor allowing material transfer to do batch splitting or other related functions.
2. Milling or sifting – a mill, sifter or other such device can be placed under an IBC elevated on the CB. The mill/sifter can be supported from a fixed structure or packaged in a module that attached to and lifted by the CB receiver.
3. Drum to IBC Transfers – A drum module can be used on the CB to handle drums in the same fashion as an IBC. See photo to the right.
4. IBC to Drum Transfers.
5. IBC size range – A column blender receiver clamps on IBC side bars so that the height of the IBC is not important.We have installations that utilize a range from 50 liter to 1800 liter IBC used in the same column blender.A pedestal blender receiver clamps the IBC on top and bottom so the overall IBC height can vary no more than 18”.
6. IBC Inversion – The CB has the capability to lift, invert, lower and unclamp an IBC allowing the IBC to be transported inverted through the facility. This capability is probably not of any present benefit for USL but could be in years to come. This feature is very useful to facilities that deal with high potency compounds that high containment valve technology since allows the IBC to be filled inverted thus eliminating the need for two expensive high containment valves.
7. General – The aforementioned applications of a Column Blender are ones we commonly encounter. The added capability of lifting and slew that a Column Blender offers opens up endless possibilities limited only by the imagination.

Blending Type Comparison - Cont

B. Floor Space Utilization – Column Blender is best.
The CB inherently has a smaller footprint than a traditional single or double pedestal blender. One exception is our model CSP (Compact Single Pedestal) blender that occupies roughly the same footprint as a column blender (photo at the end of this document).

C. Major Component Lifespan – Pedestal Blender is Best
The PB, either single or double pedestal, utilizes pillow block bearings to support the blending cradle that have a 10+ year lifespan. The CB blending cradle is supported on a compact turret bearing that has a 3-5 year lifespan based on continuous production applications. All other major components used in the CB and PB are of similar long term lifespan.

D. Equipment Complexity – Pedestal Blender less Complex
A PB has the following drive systems:

- Blend
- IBC Clamp

A CB has the following standard and optional drive systems:

- Lift
- Blend
- IBC Clamp
- Optional – Slew

E. Control System Comparison – Same Control Scheme Regardless of Blender Type.

F. Building Structural Impact – Pedestal Blender is simplest .
A pedestal blender mounts to the floor only and has a much larger footprint to distribute loads across thus generally has less impact on the building structure. A Column Blender requires a support for the top of the column either to overhead structure or adjacent wall. The CB also has a smaller base plate to distribute loadings.

Blending Type Comparison - Cont

G. Installation Effort – Depends on the facility
Generally the pedestal blender is the simplest to install but ingress moving the equipment into the room is the biggest factor. The CB ships in two major pieces, the column and the receiver.A column blender can be the simplest if the length of the column is such that it can make the turns from the loading dock into the room. The column blender receiver is much smaller and does not require large doorways as does the pedestal blender receiver. The pedestal blender can ship fully assembled but most all faculties do not have large enough doors allow pre-assembled move in. Most PB's ship disassembled in two pieces for single pedestal and three pieces for double pedestal.

H**. Preventative Maintenance – No significant difference between blender types.**
Both blender types have similar lubrication schedules for the bearings and drives.

I. Compatibility with Existing IBCs – Pedestal Blender Best
A pedestal blender generally requires no modification to a clients existing IBCs since the receiver clamps the IBC on the top and bottom. A column blender receiver requires horizontal bars on the IBC to clamp to.